

812

**United States Environmental Protection Agency
Region V
POLLUTION REPORT**

EPA Region 5 Records Ctr.



238487

Date: Tuesday, August 09, 2005

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Subject: Initial and Final POLREP
Deltech Polymers
1250 South Union Street, Troy, OH
Latitude: 40.0233
Longitude: -84.2011

POLREP No.: 1
Reporting Period: August 5, 2005
Start Date: 8/5/2005
Mob Date: 8/5/2005
Completion Date: 8/5/2005
CERCLIS ID #:
RCRIS ID #:

Site #:
D.O. #:
Response Authority: CERCLA
Response Type: Emergency
NPL Status:
Incident Category:
Contract #

Site Description

On August 5, 2005 a 30,000 gallon underground storage tank (UST), with approximately 13,000 gallons of styrene monomer began reacting and venting. In close proximity to the reacting UST was another 30,000 gallon UST, with approximately 10,000 gallons of Vinyl Toluene, along with rail cars of Vinyl Toluene and Ethyl Benzene (both approximately 177,000 pounds). In response to the uncontrolled reaction, the Ohio EPA-SWDO contacted the U.S. EPA-ERB for assistance. U.S. EPA deployed the Superfund Technical Assistance Response Team (START) and air monitoring resources to support to the incident. In addition, U.S. EPA-ERT provided plume modeling and support for the decision making process.

Current Activities

On August 5, 2005 at approximately 0700 hours, START arrived at the incident command post, located at the Chevrolet dealership south of Deltech Polymers. Ohio EPA OSC

Crawford, CSX, Troy Fire Department, and Miami County HazMat were present. START met with OSC Crawford to get an update on the situation. Because prevailing wind direction was to the northeast, residents northeast of the facility were evacuated. OSC Crawford contacted U.S. EPA OSC Gulch and requested that START collect Draeger tube samples downwind of the facility.

At 0730 hours, START collected Draeger tube samples for styrene on Dye Mill Road south-southeast of the facility and on Dixie Avenue northeast of the facility. Results were non-detect for both locations. START also collected PID readings with results of 0 parts per million (ppm) at each location.

At 0745 hours, Ohio EPA informed START that the wind direction had changed to the south towards the incident command post. START collected a Draeger tube sample at the command post. The result was approximately 10 ppm. Due to the strong odor and positive detection for styrene on the Draeger tube, the incident command post was relocated to the west of the facility.

At 0840 hours U.S. EPA OSC Gulch arrived. START, OSC Crawford, OSC Gulch, and Miami County Haz Mat met to discuss the situation. The main concern was the possibility that the styrene UST could explode, affecting an adjacent UST full of vinyl toluene and two adjacent railcars full of vinyl toluene and ethyl benzene. US EPA-ERT was instructed to provide plume modeling support for the decision making process. A decision was made to allow the tank to vent and cool, allowing the reaction to finish polymerization.

At 0950 hours, START collected an additional Draeger tube sample at the Chevrolet dealership. The result was non-detect with a reading of 0.4 ppm on the PID.

At 1000 hours, START met with the air monitoring team hired, hired by the railroad, to discuss an air monitoring strategy. The air monitoring team collected PID and LEL readings at locations within a 1/2-mile radius of the facility. EPA-START collected PID and LEL readings within a 1/2 to 1 mile radius of the facility. Results were 0 for LEL and

At 1230 hours, START mobilized RAT (Rapid Assessment Tools) to monitor for the presence of VOCs. Perimeter air monitoring was initiated within a 1-mile radius of the site. Upon completion of RAT monitoring, START provided map data to OSC Gulch and OSC Crawford. VOC readings were below 1 ppm for the entire sampling event.

At 1300 hours, Deltech Polymers employees informed OSC Crawford and OSC Gulch that the tank temperature had dropped to 150 degrees and venting of the tank had ended. START prepared to enter the tank area to collect air monitoring data using a Draeger tube sample (for styrene) a MultiRae (for VOCs, LEL, and oxygen).

At 1320 hours, START entered the tank area and confirmed that the tank was no longer emitting vapors. The Draeger tube sample collected indicated a concentration of approximately 5 ppm for Styrene. The highest reading on the PID during the entry was 5 ppm. An LEL reading of 0 was also recorded. START also observed a large tank with a

hydrogen label within close proximity to the area. Deltech Polymers did not inform EPA that this tank was present.

At 1400 hours, START met with OSC Gulch, OSC Crawford, and a representative of Deltech Polymers to report observations during the entry. START was released from the scene by OSC Gulch at approximately 1420 hours.

Planned Removal Actions

None.

Next Steps

None.

Key Issues

Limited information provided to U.S. EPA by Deltech Polymers regarding the contents and proximity of other tanks with respect to the active release location.

START, on behalf of the U.S. EPA, requested a facility map and a listing of materials stored on-site from Deltech Polymers. The facility general manager provided a copy of the facility's 'Emergency and Hazardous Chemical Inventory Form' as required by the Ohio State Emergency Response Commission. The form lists multiple flammable and reactive compounds as being stored in the vicinity of the release area. Compounds include cumene(methyl ethyl benzene), styrene, ethyl benzene, xylenes, vinyl toluene, Therminol 55(trade name), and xylenes. The compounds are stored in various containers such as above ground tanks, totes, drums, and rail cars.

Knowledge of the type, volume, and relative proximity of the compounds may have led to alternate evacuation plans and additional health and safety concerns.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
Intramural Costs				
Total Site Costs	\$0.00	\$0.00	\$0.00	0.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not

claim for cost recovery.

www.epaosc.org/DeltechPolymers